From the steppes to the Alps

Ukrainian vegetation scientist Olha Chusova reflects on her time as a postdoc at the IUNR

At the end of her 13-month research stay at the Vegetation Ecology Research Group, Dr. Olha Chusova sat down with us to discuss her time in Switzerland, where she worked on two projects under the title «Ecological niches of plants revised from a local experimental and continental database view». Olha returns to her beloved city of Kyiv, where she will continue her work as a researcher in geobotany and ecology at the National Academy of Sciences.

Hallie Seiler: Olha, how did you end up choosing the ZHAW for your postdoc position?

Olha Chusova: Actually, this project found me. Jürgen searched for a postdoc for this project, and he asked in the Eurasian Dry Grassland Group if someone knew a person who would like to join. Anna Kuzemko proposed that I look into this position, and I thought that it was a great opportunity to work with Jürgen on a project outside of Ukraine for one year. And it was my first time being out of Ukraine for such a long time.

H.S.: I think we all felt how hard you were working while you were here, too ... I remember the day after you arrived in Switzerland, we went together to the Surselva, where we hiked up about a thousand meters to Alp Glivers for a field week with students. What were your first impressions of Switzerland?

O.C.: Well, my first impressions of Switzerland were the Alps. I understood a little bit before I came – what they look like – but they appeared still very, very high! Before that, I had worked mostly in flat areas and steppe zones. Hiking in the mountains up one thousand meters in one day was really challenging for me. But it was so beautiful, this landscape ... I don't know. When we came to our house, I just forgot about everything. I just looked at this spectacular view of the Alps, it was amazing.

H.S.: Could you tell us about the two projects you worked on while you were here?

O.C.: One project was to analyze data from a mesocosm experiment and look at how

[plant] species individuals respond to changes in soil moisture level, and how this translates into a community response. So, in the experiment we were looking at species survival and biomass, and then analyzing species richness, species evenness... and trying to find the [ecological] optima for these species.

Secondly, I worked on an ecological indicator value system [Ecological Indicator Values for Europe, EIVE]. This project had been developed by Jürgen already for several years, and I came in the final stage of providing the first version of this system which contains the most comprehensive data until now. This system contains data about ecological indicators from 31 regional ecological indicator value systems from different parts of Europe. We rescaled them to a scale from 0-10 and combined them into one system for all Europe. And now, we're working on version 1.5 of this database, and trying to add the data for bryophytes, lichens, and macroalgae.

H.S.: I think unifying all of these different systems into one cohesive whole is quite the feat.

O.C.: It was actually a big problem because different systems in all of Europe have many differences between each other. So, it could be different scales, different understandings of taxonomy... some systems are old. We took systems from the 1950s until nowadays. Of course, in different countries, there can be different understandings of the same species, synonymic questions. And of course, combining information about the ecological niches of the same species in different areas can also be very challenging, because [for example,] conditions for species in southern and northern Europe can be very different.

H.S.: This sounds to me like a challenging project, but one that offers many opportunities to get a broad overview of vegetation science throughout Europe.

O.C.: Yes, and it was important to us that our system has open code, and is all open source, so there's a big opportunity to moderate it and make it better and better.

H.S.: How did you spend your free time?

O.C.: In Switzerland, there are so many opportunities and so many different places you can go. I tried to visit as many as possible, on the weekends and on my free days... I've been to many cities and other places in Switzerland; I was very... not busy, but very active and glad to see it all!

H.S.: But there must have been also some things you missed about your homeland while you were here. What do you think you missed the most?

O.C.: [immediately] People. Of course, my friends, my relatives ... and food! [laughs]

H.S.: I imagine that the food is very different ...

O.C.: Not very, very different – not like Asian food, for example. But I missed some specific dishes. For example, Varenyky. It's a traditional [Ukrainian] dish. The problem is, it takes a lot of time to prepare it, since it's dumplings and you make them by hand. It's not a dish you can prepare for yourself every day.



H.S.: But maybe there's also something you'll miss about Switzerland when you go back to Ukraine?

O.C.: Yes, it's true – I will miss this spectacular nature. These landscapes – green mountains, lakes with water so transparent that you can see very, very deep – it was something I fell in love with from the first days. It's something I will really miss.

H.S.: How are you feeling as you prepare to go back?

O.C.: Well, for now I think I'm just really happy. I'm already imagining how I'll meet my friends and family – I really missed them. But I think after several weeks, there will be things I will miss about Switzerland the same way. H.S.: We'll definitely miss you in our research group and you're welcome to come visit anytime! But I think we'll be in contact, collaborating on different projects in the future, as well.

O.C.: I also hope so. You guys were so hospitable to me – I felt myself at home in your group. I hope that we will collaborate in the future.

First publication from the project

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